



# NAVMARSPECCEN (NMSC)



## Navy and Marine Corps Spectrum Offices (NMCSO) Status

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# Overview



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# NMCSO Mission Responsibilities



- As outlined in
  - OPNAV Instruction 2400.1f
  - NTP-6(e) "Electromagnetic Spectrum (EMS) Guide"
  - Fleet COMMOPLAN (Annex K) Appendix 5 "Electromagnetic Spectrum Management"
- **Eight** Navy & Marine Corps Spectrum Offices (NMCSO) provide day-to-day support for Navy and Marine Corps under NAVMARSPECCEN.
- NMCSOs support the following primary SM functions:
  - Conduct Evaluations to Support Effective Use of Spectrum
  - Assist with refresher training and guidance on policy, guidance, procedures, required tools (software and hardware), and technical skills training for both shore and afloat commands.
  - Respond to frequency requests and process new proposals.

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# NMCSO Mission Responsibilities

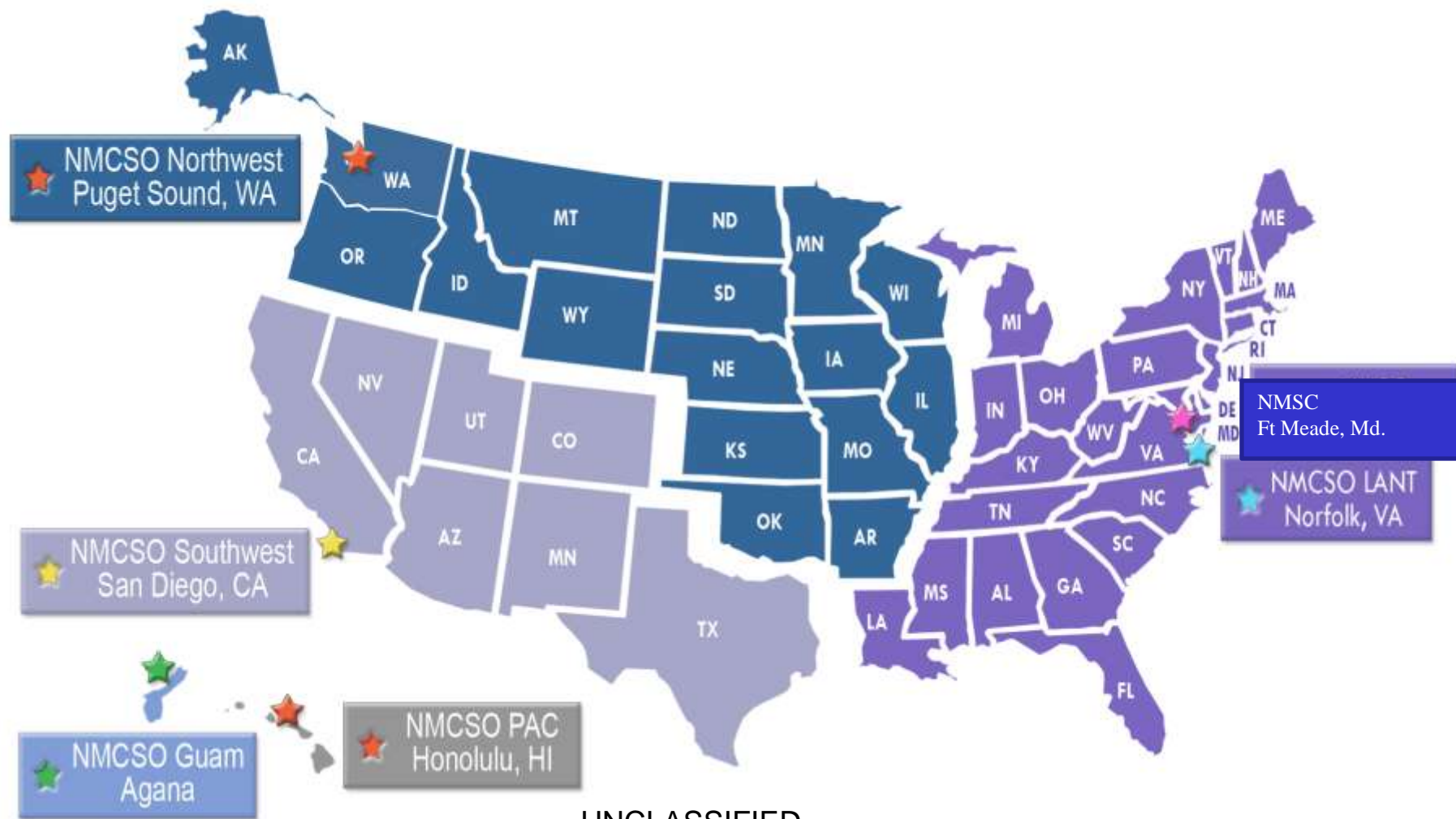


- Perform 5-year reviews of all Frequency Assignments Establish and maintain a program for Frequency Assignment review and validation
- Provide SM Support for contingency operations, exercises, and other situations
- Protect Use of Electromagnetic Spectrum. Support Combatant Commander and Fleet Operational Units in resolving electromagnetic spectrum use conflicts
- Review Joint Spectrum Interference Resolution (JSIR) reports for all meaoning, intrusion, and jamming events.
- Provide coordination, direct assistance, and/or personnel support to JTF, JSME, and Spectrum Management Planning Cells (SMPCs).
- Assist Information Operations (IO)/Electronic Warfare (EW) planners in identifying and documenting RF emitter guidance for in-port/regional area usage plans.
- Serve as the single regional point of contact (POC) to coordinate spectrum requirements for all Navy EA, GPS, and RC/CIEDD operations, testing, evaluation, jamming, and exercises.

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# NMCSO Regions (U.S. & Possessions)

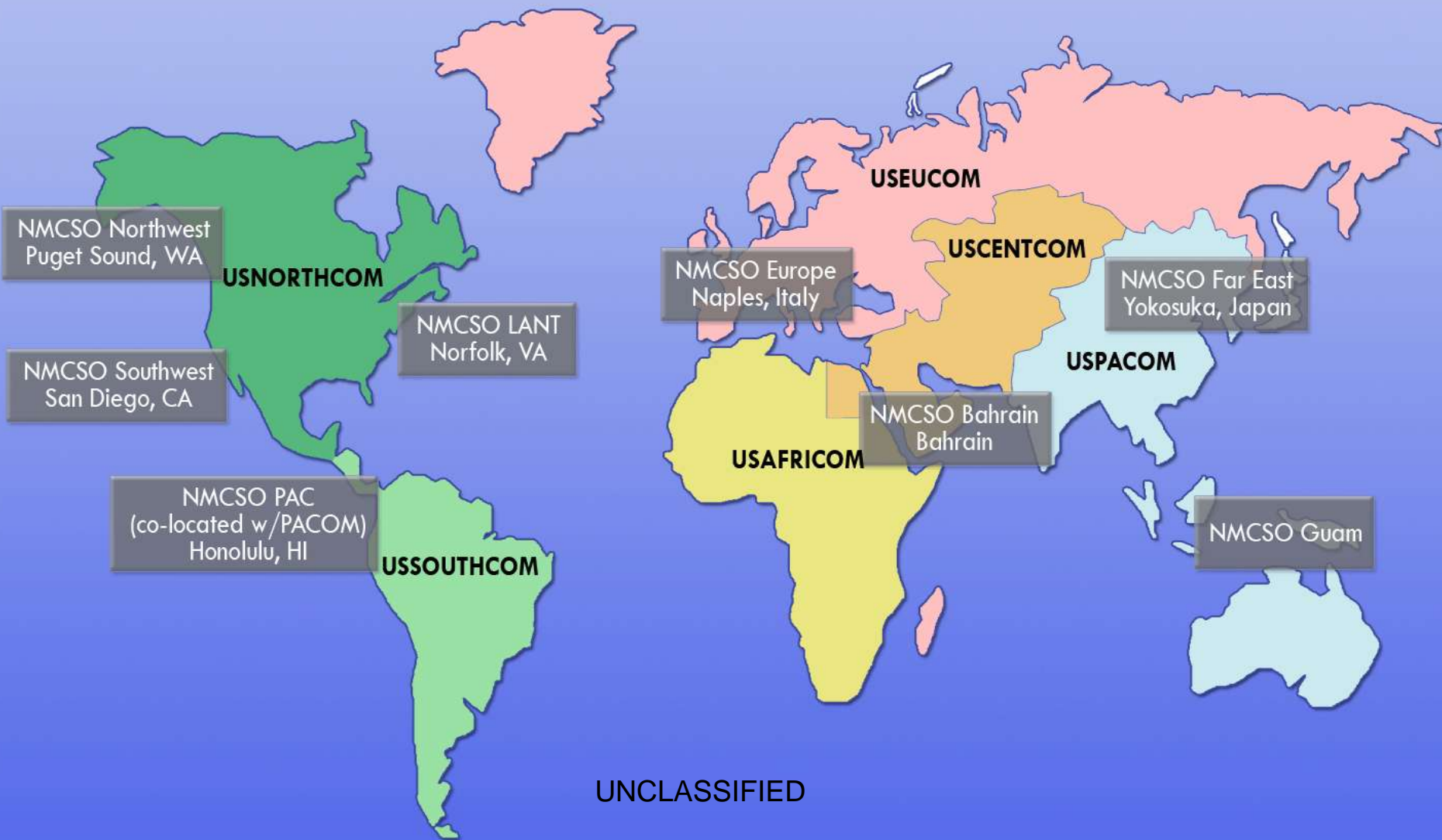


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# NMCSO Regions



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# NMCSO Regions Outside CONUS



- **Pacific:** Hawaii, all Pacific Rim countries (less Japan, S Korea, Singapore and Diego Garcia)
- **Far East:** Japan, S. Korea, Diego Garcia, Singapore.
- **Bahrain:** Gulf Cooperative Council (GCC) countries within USCENTCOM AOR, specifically the Red Sea, the North Arabian Sea, and Persian Gulf and portions of the Indian Ocean.
- **North West:** Alaska
- **Europe:** European/African countries and those ocean areas within USEUCOM and USAFRICOM.
- **Atlantic:** All countries and ocean areas under the cognizance of USSOUTHCOM and within Forth fleet AOR.

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# NMCSO

## Afloat Spectrum Support



- **AESOP** is the primary tool for management of Fleet Communications Plans and Radar Planning.
  - Afloat Electromagnetic Spectrum Operating Program (AESOP)
- Support fleet commanders by development, maintenance and scheduling of common ESG/CSG communications plans.
  - Plans are under the control of regional NMCSOs on behalf of numbered fleet commander.
- All afloat spectrum requirements will be processed via the numbered fleet commander or designated NMCSO regional representative as outlined in applicable fleet guidance.
- De-conflict and assign frequencies.
- Maintain and review fleet frequency resources and obtain additional resources as needed.

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# NMCSO

## Afloat Spectrum Support



- In all cases, when common CSG/ESG plan is assigned,
  - Strike Groups must develop its own plan using AESOP, and
  - Submit for review, validation and authorization for use by the regional NMCSO or Fleet commander prior to execution.
- TACAN Scheduling and Assignments for USN, USCG and Coalition units.
- All Standing OPTASK Comm Plans are available at the AESOP SIPRNET WEB portal within the reference library.
  - <http://cnl.phdnswc.navy.mil/aesop/>
- Ensure all Stage 4 Equipment Certifications are supported by frequency assignments.

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# NMCSO

## Electronic Warfare



- Fleet Common Plan (Annex K) App 5 “Electronic Warfare (EW) Spectrum Management and CJCSM 3212.02 Series
- NMCSO will assist in processing EA/EW, GPS Jamming, and RC/RFIED requirements as outlined in applicable instructions.
- Clearance request for ground threat simulators should be submitted by regular frequency proposal request.
- Regional NMCSO offices maintain all annual clearance authorizations and processing of special requirements.
- COCOM will be responsible for all military use of Electronic Attack (EA) frequencies within geographic area.

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# NMCSO Vs Fleet Support



NMCSO	FLEET AREA OF SUPPORT	TACAN Channel Assignment Scheduling	COMMON AESOP CSG/ESG OPTASK COM M Development /Processing/ 5yr reviews	CSG/ESG Plan Scheduling	AESOP OPTASK COM M Processing/ Validation and Sub- assignments	Frequency Proposal Processing (New&Temp)	Shore/Afloat Training Assist	EMI Conflict Resolution Assist	Electronic Warfare Request/ Review/Assist	RADAR Restriction Development / Guidance
PAC	C3F/C7F	Pending	X	Pending	X	X	X	X	X	X
LANT	C2F/C4F	C2F/C4F	X	X	X	X	X	X	X	X
EUR	C6F					X	X	X	X	
CENT	C5F	C5F	X	X	X	X	X	X	X	X
NW	C3F NW		X		X	X	X	X	X	
SW	C3F SW					X	X	X	X	
GUAM	C7F				X	X	X	X	X	
FA	C7F		X			X	X	X	X	X

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# NMCSO

## Shore Spectrum Support



- NMCSOs provide a ready resource for current regional spectrum management policy and guidance.
- NMCSOs provide guidance and training in support of operations, maintenance of DD Form 1494, Frequency Assignments, and site license requirements.
- Commands:
  - are responsible for frequency emissions originating from within the physical limits of their property.
  - will coordinate spectrum requirements with the regional NMCSO office.
  - obtain frequency authorization for each use of the electromagnetic spectrum.
  - will appoint in writing a person as the Installation Spectrum Manager who will be responsible for coordination of frequency requirements.

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# ***ACCOMPLISHMENTS***



## **NMCSO Bahrain: (Supr Keith Jones)**

- Represented COMFIFTHFLT/COMUSNAVCENT as the U.S. Delegation lead and primary speaker at the 30th and 31st GCC/U.S. DoD radio frequency EMI Conference.
- Planned, coordinated, and executed the SPS-49 proof of concept test between a US vessel and monitoring stations in Bahrain, Qatar, Saudi Arabia and Kuwait.
- Formulated C5F standing OPTASK COMMS (all inclusive 4 Carrier Strike Groups, 3 Amphibious Readiness Groups contingency OP Plan) released June 2011.
- C5F recognized NMCSO CENT BAHRAIN as the AOR Spectrum Managers for all Navy and Marine Corps Forces.

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# ***ACCOMPLISHMENTS***



## **NMCSO North West: (Supr Russell Potter)**

- Boeing P8A & LCS-3 Program - which included all bands and IFF assignments
- "Proof of Concept" for three variations of EW Simulator at locations in Washington State & Boardman Oregon.
  - This included assignments used from the simulator and IFF to track aircraft in the test area.
- Supports commands throughout 17 states and afloat.

## **NMCSO (South West) San Diego (Supr Rena Karas)**

- COOP - NAVMARSPECCEN or NMCSO LANT office operations during contingencies.
- Significant reduced in past due five Year Reviews.

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# ***ACCOMPLISHMENTS***



- NAVAIR testing of MH-60, ASP-147, APX-118/USM-719 IFF projects, F-35 APX, AND Free wave MM2-P-T.
- E2D APX-122 aircraft equipment tests.
- Navy afloat and Marine Corps exercise/training support.
- BMD FTT-12 missile defense mission support Concord, CA NMCSO Guam (Supr Robert Hedrick) and Far East (Supr Gary Vogel)
- Guam - Joint Region Marianas J6 2400.1 instruction (Radio Frequency Spectrum Mgmt signed.
- Japan - COMNAVFORJAPAN J6 2400.5 instruction (Spectrum Mgmt Policy)
- OPERATION Tomodachi – Japan Earthquake/Tsunami support within Japan, and Guam aircraft relocation support.

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# ***ACCOMPLISHMENTS***



- SEVENTHFLT Spectrum and Electronic Warfare support
- Japan significant reduction of interference through aggressive monitoring and resolution program.
  - Government of Japan Radio Monitoring Group (RMG) recognized efforts as outstanding support from U.S. military (NMCSO Far East office)

## **NMCSO PAC (Supr Randall Hall)**

- Fleet and special project support.
- Waterfront training and awareness classes.
- Operation Tomodachi OPTASKCOM support to CTF76
- Hawaiian annual Electronic Warfare clearance & management
- Supported 19 THIRD & SEVENTHFLT exercise events

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# ***ACCOMPLISHMENTS***



- Identified fifty five (55) fleet radar assignment and documentation deficiencies.
  - Coordination and processing of Note to Holders and frequency proposals.
  - THIRDFLT shipboard Stage 4 Equipment Certifications are supported by frequency assignments.
- UPX-37 and APX-118:
  - Eighty Eight (88) proposals supporting (12) ship classes for IFF operations within USP/Coastal Waters. All Modes of operations supporting various "slaved to" equipment configurations.

## **NMCSO Atlantic (Supr Janet Baker)**

- IFF (APX, UPX-37, UPX-41 T&E test events.
- UAV, Scan Eagle and Fire Scout BAMS, CARGO, Navy Global Hawk, N-UCAS UAS operational & training support.

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# ***ACCOMPLISHMENTS***



- Fleet TACAN Channel scheduling and support.
- Management & scheduling of Atlantic fleet standing OPTASKCOMMS for Carrier Strike and Expeditionary/ Amphibious Readiness Groups.
- High visibility ONR field demonstration.
- Supports major exercises for UK Auriga, PANAMAX, and numerous fleet and Marine Corps regional requirements.

## **NMCSO Europe (Supr Mark Brushwood)**

- Regional TRIDENT missile testing.
- Unmanned Aerial Systems support
  - Used in LANT/MED/IO AOR's
  - Set up same frequencies for afloat command as they inchop/outchop

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# *ACCOMPLISHMENTS*



- Regional Electronic Harbor Security System (EHSS) upgrades.
- Dialog ongoing to place the NMCSO EUR as focal point for processing all NAVEUR/NAVAF/6FLT spectrum requirements.
- Wireless Pier Connection System (WPCS) regional support.

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# ***ACCOMPLISHMENTS NMCSO***



- Annual NMCSO Frequency Transactions for 2011
  - Processed **30486** records.
- Drafted/Revised/Reviewed **75** plus OPTASKCOMS
- Reduced past due Navy and Marine Corps record backlog
  - (2001-2005) In excess of **4704** to date.
- TACAN Fleet Channel Scheduling/Assignments:
  - **600** plus from NMCSO LANT office and reviews by PAC offices
- Ongoing Improvements to Government Master File (GMF) data accuracy through assignment/equipment certification reviews of all Navy & Marine Corps records.

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# ***NMCSO Supervisor Point of Contacts***



<https://www.portal.navy.mil/cyberfor/N4/n45/spectrummanagement/default.aspx>

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